

## Abstract

### **Radio communications system and components for a method of radio transmission by various radio transmission modes**

A radio communications system is proposed in which the at least one base station (BS1) also contains a transceiver in order to transmit and receive by various radio transmission modes (DECT, GSM, UMTS) and in which the at least one base station (BS1) is connected to a control means (RRM) which determines an availability value for each of the various radio transmission modes (DECT, GSM, UMTS) with the aid of preselectable criteria and controls the base station (BS1) in order to transmit to the wireless subscriber terminal (MT) an identification code at least for the radio transmission mode (DECT) which has the highest availability value. In addition, a method of radio transmission with corresponding features is proposed.

Owing to the invention proposed, it is achieved that at least the radio transmission mode (DECT) which has the best instantaneous availability in the coverage area of the base station (BS1) is offered to the subscriber terminal (MT) by the base station (BS1). A control means (RRM) connected to all base stations can carry out this function centrally in order to utilise the radio resources of the entire system, which is preferably designed as multi-standard system, very efficiently. The gradual introduction of new technology, in particular new standards (UMTS), into the radio communications system is possible and is therefore very simple and cost efficient.

(Fig. 1)